

Abstract:

The effect of Low Level Laser Therapy (LLLT) in management of postsurgical complications of impacted lower third molar removal.

Introduction:

The extraction of the impacted mandibular third molar is a common oral surgical procedure. Pain, trismus and edema are the common complications related. These complications have been reported to have an adverse effect on the quality of life of patients. The aim of this study is to evaluate the efficacy of low level laser therapy in controlling postoperative complications, after extraction of lower third molars.

Method and materials:

A randomized double blind clinical study was done on 50 patients whom were candidate for surgical removal of impacted lower third molar in soft tissue. 25 patients received low power laser therapy with an 810 nm wave length applied intra orally for 10 seconds after extraction procedure. The energy output was 15J with constant power density of 0.5W. Laser treatment was simulated in other 25 patients. Postoperative complications then were evaluated on first, third and seventh days follow the extraction during 3 visits. After completing and gathering the questionnaires the collected data entered in to SPSS software and analyzed by statistical methods.

Result:

Result showed that the pain level in both groups reduced thru first to third visits. So that the pain reduction in laser group was reported 88/3% and in placebo group 45.3% ,which was statistically significant in laser group. In other words, the average pain level was 2.2 times more in placebo group in compare to experimental group during 3 visits. Both treatment modalities showed no statistical significant difference on postoperative trismus and edema.

Conclusion:

The use of LLLT was a promising therapy in reducing the postoperative pain after surgical extraction of lower third molars which can be used as a safety method to replace drug treatments.

Keywords:

Low Level Laser Therapy_3rd molar surgery_Surgical Complications.